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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,478

11/20/2006

Anders Egholm Hansen

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EXAMINER

PATEL, VISHAL A

ART UNIT

PAPER NUMBER

3676

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,478	<b>Applicant(s)</b> HANSEN, ANDERS EGHOLM	
	<b>Examiner</b> Vishal Patel	<b>Art Unit</b> 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 recites the limitation "the face of the bushing" in line 4. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Skinner (US. 4,242,164).

Skinner discloses a resilient sleeve (e.g. Figure 4) extending around a shaft (e.g. around 16) and being secured around the shaft (e.g. figures 1 and 4) and optionally also around an exterior of the housing or shield extending around the shaft (e.g. secured around 10, figure 1), a face of a bushing (e.g. bushing face near 32 and portion of 26) extending toward the shaft is provided with ribs, waves (e.g. 35) in about one half of the length of the bushing to seal around the shaft (e.g. figure 4 shows this). The ribs, the waves extend near the inner end of the bushing (e.g. figure 4 shows this). The resilient sleeve is made of a piece of rubber, plastic or elastomeric material.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner in view of Tsuchimoto et al (US. 4,546,033).

Skinner discloses the invention substantially as claimed above but fails to disclose that the resilient sleeve is formed of HNBR polymer. Hetherington discloses a gasket that is made of fiber composite with polymer that is selected from silicon rubber, fluorosilicone rubbers, NHBR rubber and etc. It would have been obvious to one having ordinary skilled in the art at the time of the invention to have the rubber and/or polymer of Skinner be replaced by NHBR as taught by Hetherington, since using one type of material or another type of material is considered to be art equivalent.

7. Claims 3-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner and Tsuchimoto et al (US. 4,546,033) as applied to claims above, and further in view of Hetherington (US. 20040024133).

Skinner discloses the invention substantially as claimed above but fails to disclose that the resilient sleeve is formed of HNBR polymer with fibers made of phenols. Tsuchimoto discloses a sealing member made of NBR, NR, SBR or like materials with fibers such as phenol fibers (column 2, lines 14-20). It would have been obvious to one having ordinary skilled in the art at the time of the invention to have the resilient sleeve of Skinner be made of fiber and rubber

Art Unit: 3676

combination as taught by Tsuchimoto, to provide heat resistance and durability (column 1, lines 10-15 of Tsuchimoto).

Skinner and Tsuchimoto disclose the invention substantially as claimed above but fail to disclose that the resilient sleeve is made of HNBR polymer. Hetherington discloses a gasket that is made of fiber composite with polymer that is selected from silicon rubber, fluorosilicone rubbers, NHBR rubber and etc. It would have been obvious to one having ordinary skill in the art at the time of the invention to have the rubber and/or polymer of Skinner and Tsuchimoto be replaced by NHBR as taught by Hetherington, since using one type of material or another type of material is considered to be art equivalent.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Stickel et al, Skinner et al, Brancher et al, Maimstrom et al and Rowe.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer H. Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3676

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. P./

Primary Examiner, Art Unit 3676

/Vishal Patel/

Primary Examiner, Art Unit 3676